Title (en)

SEPARATION MEDIA AND METHODS ESPECIALLY USEFUL FOR SEPARATING WATER-HYDROCARBON EMULSIONS HAVING LOW INTERFACIAL TENSIONS

Title (de)

TRENNMEDIEN UND VERFAHREN, IM BESONDEREN ZUR TRENNUNG VON WASSER-KOHLENWASSERSTOFF-EMULSIONEN MIT NIEDRIGER GRENZFLÄCHENSPANNUNG

Title (fr)

PROCÉDÉS ET MILIEUX DE SÉPARATION PARTICULIÈREMENT UTILES POUR LA SÉPARATION D'ÉMULSIONS EAU-HYDROCARBURE AYANT DES TENSIONS INTERFACIALES BASSES

Publication

EP 2485823 B1 20170405 (EN)

Application

EP 10779024 A 20101007

Priority

• US 57683909 A 20091009
• FI 2010050777 W 20101007

Abstract (en)

[origin: US2011084028A1] Separation media, separation modules and methods are provided for separating water from a water and hydrocarbon emulsion and include a fibrous nonwoven coalescence layer for receiving the water and hydrocarbon emulsion and coalescing the water present therein as a discontinuous phase to achieve coalesced water droplets having a size of 1 mm or greater, and a fibrous nonwoven drop retention layer downstream of the coalescence layer having a high BET surface area of at least 90 m2/g or greater sufficient to retain the size of the coalesced water droplets to allow separation thereof from the hydrocarbon.

IPC 8 full level

B01D 17/04 (2006.01); **B01D 36/00** (2006.01); **B01D 39/00** (2006.01); **B01D 46/00** (2006.01); **C10G 33/06** (2006.01); **F02M 37/24** (2019.01); F02M 37/32 (2019.01)

CPC (source: EP KR US)

B01D 17/045 (2013.01 - EP KR US); **C10G 33/06** (2013.01 - EP KR US); **F02M 37/24** (2018.12 - EP KR US); B01D 2239/0414 (2013.01 - EP KR US); B01D 2239/0618 (2013.01 - EP KR US); B01D 2239/065 (2013.01 - EP KR US); B01D 2239/1291 (2013.01 - EP US); C10G 2300/1014 (2013.01 - EP KR US); C10G 2300/30 (2013.01 - EP US); C10G 2400/04 (2013.01 - EP KR US); F02M 37/32 (2018.12 - EP US); Y02P 30/20 (2015.11 - EP US); Y10S 210/05 (2013.01 - EP KR US)

Cited by

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Designated contracting state (EPC)

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DOCDB simple family (publication)

US 2011084028 A1 20110414; BR 112012007819 A2 20160308; BR 112012007819 B1 20201215; CA 2775013 A1 20110414; CA 2775013 C 20170711; CN 102665844 A 20120912; CN 102665844 B 20150805; EP 2485823 A1 20120815; EP 2485823 B1 20170405; ES 2629866 T3 20170816; JP 2013507235 A 20130304; KR 101797477 B1 20171115; KR 20120101342 A 20120913; MX 2012003788 A 20120522; RU 2012118764 A 20131120; RU 2540305 C2 20150210; US 2012043281 A1 20120223; US 2012261330 A1 20121018; US 2012261358 A1 20121018; US 8177984 B2 20120515; US 8524081 B2 20130903; US 8747668 B2 20140610; WO 2011042605 A1 20110414

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